

Remarks

Claims 13-25 have been cancelled. New claims 26-37 are presented herein and represent all of the claims currently pending in the present application.

Support for the newly-presented claims can be found in the application and claims as originally filed and, for specific limitations, as follows:

Claim 26: page 13, beginning at line 22, an example of hydrocarbon binder amount is provided; page 9, line 6, the term “effective amount” is defined for the amount of bacteria spore blend used in the process of the present invention;

Claims 27-31: page 13, line 13, application to an individual fiber or a floor covering prior to dying is described; page 13, last line discloses a pH range of 5.0-8.0; page 12, beginning at line 17, the wet add on of the solution between 5% and 25% is disclosed; page 12, lines 18-20 describes curing in a dry heat zone; page 12, lines 7-10 describe dilution to a range of 7.5%-10.8%;

Claim 32: page 13, lines 7-9 provide the range of fluorochemicals between 1.25%-4.0%; page 12, lines 8-10 provide support for the percentage of face yarn weight of 0.9%-1.29%;

Claims 33-37: page 13, line 13, application to an individual fiber or a floor covering prior to dying is described; page 13, last line discloses a pH range of 5.0-8.0; page 12, beginning at line 17, the wet add on of the solution between 5% and 25% is disclosed; page 12, lines 18-20 describes curing in a dry heat zone; page 12, lines 7-10 describe dilution to a range of 7.5%-10.8%;

Rejections under 35 USC § 112

The Examiner rejected claims 13-25 under 35 USC § 112, first paragraph, as containing subject matter “not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.” Specifically, the Examiner indicated that Applicants have failed to point out the basis for newly-added limitations to the claims, especially with respect to the limitation “in a solution of between 2% to 4% binder” as it pertains to anything other than hydrocarbon binders.

Applicants have cancelled claims 13-25 and present new claims 26-37. Support for the newly-added claims is provided above. Applicants have presented separate claims to the process which includes hydrocarbon binders and the process which includes fluorochemical binders. Because specific support for the new claims is provided in the specification, Applicants respectfully request withdrawal of this rejection.

The Examiner additionally rejected the claims under 35 USC § 112, first paragraph, due to the use of the term “fluorocarbon” binder. Applicants have amended the term to refer to “fluorochemical” binders, a term which finds support throughout the specification as originally filed, including at page 13, line 7. Because this term is adequately supported by the specification, as originally filed, Applicants respectfully request withdrawal of this rejection.

The Examiner rejected claims 13-25 under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out the subject matter which Applicant regards as his invention. Specifically, the Examiner indicated that the independent claims fail to provide for an amount of the active component, i.e., the bacteria spore blend, present in the solution. Applicants have incorporated the term “an effective amount” into the newly-presented claims to indicate the amount of bacteria spore blend present in the solution. This term is defined in the specification, beginning at page 9, line 6. As the claims must be read in light of the specification, Applicants respectfully submit that the claim, as now presented, adequately points out and defines that which Applicants regard as their invention. Accordingly, Applicants respectfully request withdrawal of this rejection.

The Examiner also rejected claim 22 as being indefinite with respect to the amount of dilution claimed. Specifically, the Examiner indicated that since “we do not know how much of the spore blend is in the original odor control solution, we cannot know how much is in the diluted solution.” Applicants respectfully request withdrawal of this ground of rejection in light of the inclusion of the term “effective amount” incorporated into the independent claims. As the term “effective amount”, as interpreted in light of the specification, provides the necessary information with respect to the original odor solution, the dilution factors provided can no longer be indefinite.

The Examiner objected to claims 20-21, 23-24 as failing to modify the terms “hydrocarbons” and “fluorochemicals.” Applicants have modified these terms using the term “one or more of” prior to the terms. Support for the “one or more of” language can be found throughout the specification, for example at page 13, beginning at line 7.

The Examiner rejected claim 16 under 35 USC 112, second paragraph, as failing to particularly point out the subject matter which Applicants regard as their invention. Specifically, the Examiner questions what the “wet add on” amount is based upon. The claims specify that the odor control solution, itself, is applied at between 5% to 25% wet add on. The term “wet add on” is a term of art, readily understood by one of ordinary skill in the art to describe the application of a liquid material to a fibrous substrate.

Rejections over Cited Art

The Examiner rejected claims 13-25 under 35 USC 103(a) as being obvious in light of Cordick et al., WO 00/03753 (“Cordick”). Applicants respectfully traverse this rejection.

The Examiner indicated that Cordick discloses a process for treating carpet fibers with a bacteria spore blend to prevent odor. She further noted that the spore blend solution is an aqueous solution of fluorochemical, applied from an aerosol. The Examiner then took Official notice that lower hydrocarbons are conventionally used as propellants for aerosol containers. Based on these teachings and on the Official notice, the Examiner concluded that the limitations of claims 13-25 are disclosed by Cordick, except for the quantity of spore blend on the carpet or the wet add on amount of the odor treatment solution. Applicants respectfully traverse.

Claim 26 is directed to a method for treating a carpet fiber or a carpet with a solution of bacteria and binder, wherein the binder is one or more hydrocarbons present in an amount from 2% to 4% with the product on yield percentage of face fiber between 0.3% and 0.6%. Claim 32 is directed to a method for treating a carpet fiber or a carpet with a solution of bacteria and binder, wherein the binder is one or more fluorochemicals, present in an amount from 1.25% to 4% with the product on yield percentage of face fiber between 0.9% and 1.29%. Cordick does not teach the bacteria *in solution of binder*

within the claimed ranges. Rather, Cordick teaches a non-dilute, aqueous solution of fluorochemicals and bacteria for application on carpet fibers for the purpose of controlling odor. Nothing in the disclosure of Cordick would motivate the ordinary artisan to prepare a composition of bacteria plus binder alone, nor would one be motivated to dilute the solution *to an application solution of between 1.25% to 4%*.

Additionally, the reference fails to disclose *a solution* of hydrocarbons in combination with the bacteria. While the Examiner's Official Notice of the use of hydrocarbons as propellants is acknowledged, Applicants respectfully submit that there is no teaching or suggestion that the hydrocarbon propellants would form a solution with the agent being dispensed. The Examiner has not shown, and the reference does not teach, that a propellant would naturally combine with the agent it is dispensing. Accordingly, there is no teaching or suggestion that the prior art forms a solution of hydrocarbons and bacteria spore blends.

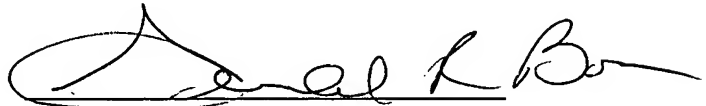
Even if the reference alludes to the active solutions used in the process claimed herein, the reference is not enabling to practice the claimed process. The reference provides no guidance as to amounts of fluorochemical and/or stain blocker used in the solution; no guidance as to how to dilute a concentrated solution of the active solution; and no guidance as to how to apply the solution so as to achieve an applied concentration on the carpeting. As the reference fails to teach how to make and use the solution, it cannot be considered to be enabling. *Applicants note that the Examiner did not respond to this argument, previously presented in the Response to Office Action filed on February 2, 2004.*

Because the limitations of the claims now presented herein are neither taught nor suggested by the Cordick reference, Applicants respectfully request withdrawal of the rejections in light of Cordick. Dependant claims 14-22 are also considered patentable over Cordick, based on the patentability of the independent claims and on the various limitations contained in the dependent claims.

U.S. Patent Application Serial No. 10/042,861
Applicant: PETERS, Frank et al.

This response and the accompanying Request for Continued Examination represent a complete response to the Final Office Action dated March 31, 2004. The accompanying Petition for Extension of Time for one month, to and including July 31, 2004 renders this Response timely. In light of the amendments and arguments presented herein, Applicants respectfully request allowance of all of the pending claims. If the Examiner has any questions, she is urged to contact the undersigned prior to issuance of an additional Office Action so that all issues can be resolved and the prosecution of this application can be expedited.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Gerald R. Boss", written over a horizontal line.

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